Seventh Prof. G. Subba Rao Memorial Lecture – V. K. Khanna, SAAEG India Chapter, (E: vk1234@gmail.com). B.S. Rathore, Govt. Science College, Jabalpur – 482 001. (E: bsrjbp@gmail.com)

The Seventh Prof. G. Subba Rao Memorial Lecture was delivered by Pramod O. Alexander, Ex-Professor of Geology, Dr. H.S. Gour University, Saugor on 12th April 2017 at Govt. Science College, Jabalpur. The memorial lecture was organized under the aegis of South Asian Association of Economic Geologists (SAAEG), India Chapter and the Department of Geology, Govt. Science College, Jabalpur. Prof. G. Subba Rao was the founder Head of the Department, established in 1947. Prof. Alexander spoke on 'Unconventional Systems is Ore Prospecting with particular references to Diamond'.

Prof. Alexander said that dispersion and expression of a buried deposit through vegetation although not a conventional method for prospecting, has huge potential as an exploration tool that too at a lower cost. Failure of detecting a particular deposit through modern exploration tools and later its recognition by dispersion trail left behind by burrowing animals is not uncommon in the history of mineral prospecting. Mir pipe, Siberia and Orapa pipe in Botswana which later became world's largest diamond mining pits are the examples.

Utilizing the underground non-stop activity of termites and ants, for not too-deeply buried deposits (metallic or non-metallic) in tropical and arid regions are the quickest and most economic way for detailed exploration.

Role of microorganisms, in particular, tiny bacteria account for the formation and breakdown of a number of mineral deposits including ferrous metals, sulphides and native gold. Prof. Alexander said that

he was fortunate to have first hand experience of working at the USGS Microbiology Laboratory at Denver, Colorado to precipitate tiny gold crystals from weak solution using bacterium *B.cereus*. These experiments give a tangible explanation of bacterial growth of nuggets in situ.

Prof. Alexander emphasized that etymology and nature's way of revealing buried mineral deposits through plant and animal, geobotany and biochemistry are now fairly well established tools, may not be in our country but in many other mineral rich nations like USA, Australia, China, Argentina etc. Prof. Alexander said that his attempts to introduce these techniques in major geological institutions of India never materialized. But its roots one can find in Varahmihira's Brihat Samhita (Varahmihir, A.D. 505-587). Meaning of Shloka 53 is "If there is a patch of grass in grassless region or grassless patch in grassy region, water or treasure (mineral deposit) is declared to exist."

Dr. V.K. Khanna, Convenor and Vice President SAAEG, India Chapter informed that Prof. G. Subba Rao memorial lecture is organized at national level. Dr. M.K. Thakur, Principal and Dr. B.S. Rathore, Head of Geology Department said that students of Prof. Subba Rao earned good name in India and abroad.

A large number of students and geoscientists from different organizations attended the memorial lecture and the programme was conducted by Dr. D.K. Deolia and vote of thanks was proposed by Dr. Sanjay Tignath.

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INVITES NOMINATIONS FROM SCIENTISTS/RESEARCHERS FOR FORTHCOMING IODP EXPEDITIONS

The Director, National Centre for Antarctic & Ocean Research (NCAOR), on behalf of IODP - India invites nominations **in a prescribed format** along with detailed bio-data and research/professional experience, from geoscientists/researchers working in established national institutions/organizations and universities, to participate in the forthcoming Integrated Ocean Discovery Program (IODP) expedition 378 (**SOUTH PACIFIC PALEOGENE CLIMATE EXPEDITION**). NCAOR will provide the requisite financial support to the selected candidates towards their participation in the said expedition. However, it will be the responsibility of the candidates to obtain the necessary Visas / permissions from the countries of embarkation and disembarkation on their own. A scientific plan is mandatory for a successful nomination. Once nominated, candidates will have to submit a detailed science plan along with sample data request which may also form a basis for collaborative research programs between their host organization and NCAOR.

Further details including last date of nominations and format can be obtained at www.ncaor.gov.in or by email to iodp.india@ncaor.gov.in. Last date by which NCAOR receives nominations is **30th October 2017**.

Advt. No. NCAOR/52/17

For and on behalf of NCAOR
Program Officer (IODP-India)